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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/832,897	04/12/2001	Kenichi Ueyama	205733US0	1680
22850	7590	04/12/2006	EXAMINER	
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			GOLLAMUDI, SHARMILA S	
			ART UNIT	PAPER NUMBER
			1616	

DATE MAILED: 04/12/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/832,897	<b>Applicant(s)</b> UEYAMA ET AL.	
	<b>Examiner</b> Sharmila S. Gollamudi	<b>Art Unit</b> 1616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 20 January 2006.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-5, 16, 17, 19, 20 and 22-33 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5, 16, 17, 19, 20 and 22-33 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

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### DETAILED ACTION

Receipt of Amendments and Remarks filed 1/20/06 is acknowledged. Claims 1-5, 16-17, 19-20, and 22-33 are pending in this application. Claims 6-15, 12-15, 18, and 21 stand cancelled.

#### *Claim Rejections - 35 USC § 112*

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

**Claims 1-5, 16-17, 19-20, and 22-33 rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.**

The independent claims have been amended to be directed to a composition that comprises 50-99% by weight of the solvent; however the instant specification does not provide support for such limitation. Applicant cites page 3 for support; however it is noted that applicant has support for 3-99% and 5-50% but this does not provide for the combination range to 50-99%. With regard to claims 31-33, the examiner notes that the examples provide support for 5% of the oil agent and 95% of the solvent; however applicant does not have support for “about 5%” and “about 95%”.

**The rejection of claim 11 under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention is withdrawn in view of the cancellation of the claim.**

***Response to Arguments***

Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

**Claims 1-3, 20, 23, 28-29 are rejected under 35 U.S.C. 102(b) as being anticipated by Etheredge (5,308,609).**

Etheredge discloses a composition for protecting keratin containing substances on the body, including hair, skin, and nails, from damage. See abstract. Etheredge discloses mechanical and chemical damage of the hair may be treated by applying to the hair, at slightly elevated temperatures, a composition comprising an oleophilic liquid vehicle for penetrating within the hair fiber. See column 3, lines 60-67. Etheredge discloses aqueous compositions only slowly penetrate the dense hair structure, whereas the oleophilic vehicle and ingredients penetrate into the hair shaft. See column 4, lines 3-10.

The preferred use of oleic acid or palmitic acid as the liquid vehicle. Note that oleic acid reads on vegetable oil. Other oleophilic materials include fatty alcohols (oleyl alcohol); fatty acid esters (methyl oleate or ethyl oleate); glyceryl esters of fatty acids (glyceryl monooleate, glyceryl dioleate, glyceryl trioleate (triolein), glyceryl monolinoleate). See column 4, lines 30-

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50. The use of hydrocarbons (paraffin) are also disclosed to diffuse into the damage site of the hair. See column 4, lines 49-65. Etheredge discloses the use of SD alcohol as a penetration enhancer. See column 5, lines 29-31.

Etheredge discloses that the composition is applied prior to shampooing and heat can be used to accelerate diffusion of the reagents into the hair and scalp. If applied at room temperature, diffusion into the hair and scalp will be essentially completed in on the order of 15-20 minutes. When the formulation is warmed prior to applying or, if applied at room temperature, a hot towel is wrapped around the hair, the diffusion time may be shortened somewhat, e.g. to 10-15 minutes. In either case, after the prescribed time, the excess treatment formulation is shampooed from the hair and normal salon treatment is resumed. See column 8, lines 30-45.

Example 3 discloses a composition comprising 86.50% isopropanol, 1.75% sebacic acid, 1.75% eicosane (reads on hydrocarbon oils), and 10% oleic acid (reads on vegetable oil). The composition is applied before shampooing to the hair. A heat lamp is applied and left for 15-20 minutes. The composition is then shampooed. See example 6 and 7 together.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

**The rejection of claims 1, 11, 20, 23, 28 under 35 U.S.C. 103(a) as being unpatentable over Ona et al (4,450,152) in view of Kim et al (6,329,472) is withdrawn in view of the amendment of 1/20/06 since Ona teaches away from the use of a polydimethylsiloxane.**

**The claims 1, 16-17, 19, 20, 22-24, 28, and 30 under 35 U.S.C. 103(a) as being unpatentable over Komori et al (5,342,611) in view of Okumura et al (4,402,936) are withdrawn in view of the amendments of 1/20/06. However, this rejection will be reinstated once the new matter is deleted.**

**Claims 1-5, 17, 20, 23, 28-29, 31-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 64-066107 to Kenji et al in view of Andersin (GB 824,353) in further view of Priest et al (4,296,763).**

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Kenji teaches a oily cosmetic for imparting softness, which may be used as a body oil, baby oil, and hair oil. The composition comprises 18-92% of a blend of citric acid triethyl ester and a liquid fatty acid ester (2-ethylhexanoic acid triglyceride) and 5-80% of ethanol.

Although Kenji teaches a hair oil and teaches the composition imparting softness, Kenji does not teach the method in utilizing the hair oil, i.e. leaving it in for a prolonged period of time, followed by washing it out.

Andersin teaches a hair oil containing oil and an alcohol for hair improvement. Andersin teaches that hair oil is rubbed into the scalp and wrapped in a scarf to allow the oil to penetrate the scalp without disturbance as long as possible. After this, the hair must be washed and rinsed to provide hair that has new life and is elastic. See column 1.

Priest et al disclose a hair conditioning composition contained in a heating cap to provide "hot oil treatment". The composition contains oil and other components. See column 2, lines 3-14. Priest teaches the use of temperatures in the excess of 125 degrees Fahrenheit allow the oils such as vegetable or synthetic oils to penetrate the hair. Further, the oils act effectively to condition the hair if the oil is left on the hair for 15 to 20 minutes at elevated temperatures. See column 2, lines 15-17. Thus, when the hair is washed, the residual oil promotes luster, improves hair condition, and allays irritation. See column 3, lines 23-32.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Kenji et al, Andersin, and Priest et al and utilize Kenji's hair oil in the instant manner, i.e. as a hot oil treatment for the hair. One would have been motivated to do so since Andersin teaches the general state of hair oil treatment art wherein for conditioning purposes, oil is left on the hair as long as possible to allow the oil to penetrate the

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scalp and then shampooed; thus improving hair texture. Moreover, Priest et al states that if heat is applied to the hair containing an oil composition, the oil penetrates the hair shaft better and conditions the hair effectively in 15 to 20 minutes. Thus, a skilled artisan would have expected better conditioning effects by leaving the oil for at least 15 to 20 minutes in the hair since this allows the oil to penetrate the scalp and the application of heat allows for faster penetration of the oil. Lastly, a skilled artisan would have reasonably expected success and similar results since all three references endeavor to condition the hair with hair oil.

**Claims 16-17, 19, 24-25, and 30-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Etheredge (5,308,609) in view of Horin et al (4,279,262).**

As set forth above, Etheredge discloses a composition for protecting keratin containing substances on the body, including hair, skin, and nails, from damage. See abstract. Etheredge discloses mechanical and chemical damage of the hair may be treated by applying to the hair, at slightly elevated temperatures, a composition comprising an oleophilic liquid vehicle for penetrating within the hair fiber. See column 3, lines 60-67. Etheredge discloses aqueous compositions only slowly penetrate the dense hair structure, whereas the oleophilic vehicle and ingredients penetrate into the hair shaft. See column 4, lines 3-10.

The preferred use of oleic acid or palmitic acid as the liquid vehicle. Note that oleic acid reads on vegetable oil. Other oleophilic materials include fatty alcohols (oleyl alcohol); fatty acid esters (methyl oleate or ethyl oleate); glyceryl esters of fatty acids (glyceryl monooleate, glyceryl dioleate, glyceryl trioleate (triolein), glyceryl monolinoleate). See column 4, lines 30-50. The use of hydrocarbons (paraffin) are also disclosed to diffuse into the damage site of the



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hair. See column 4, lines 49-65. Etheredge discloses the use of SD alcohol as a penetration enhancer and as a solvent (to dissolve the sebatic acid). See column 5, lines 29-31.

Etheredge discloses that the composition is applied prior to shampooing and heat can be used to accelerate diffusion of the reagents into the hair and scalp. If applied at room temperature, diffusion into the hair and scalp will be essentially completed in on the order of 15-20 minutes. When the formulation is warmed prior to applying or, if applied at room temperature, a hot towel is wrapped around the hair, the diffusion time may be shortened somewhat, e.g. to 10-15 minutes. In either case, after the prescribed time, the excess treatment formulation is shampooed from the hair and normal salon treatment is resumed. See column 8, lines 30-45.

Example 3 discloses a composition comprising 86.50% isopropanol, 1.75% sebatic acid, 1.75% eicosane (reads on hydrocarbon oils), and 10% oleic acid (reads on vegetable oil). The composition is applied before shampooing to the hair. A heat lamp is applied and left for 15-20 minutes. The composition is then shampooed. See example 6 and 7 together.

Etheredge does not teach the instant oil agents.

Horin teaches a pre-shampoo hair treating agent comprising lanolin (animal fat). Horin teaches the use of other oily agents including glycerides such as castor oil and olive oil, hydrocarbons such as liquid paraffin and white vaseline, alcohols such as cetyl alcohol, stearyl alcohol, oleyl alcohol and hexadecyl alcohol, and esters such as ethyl linoleate, ethyl oleate, isopropyl palmitate, decyl oleate and oleyl oleate. See column 5, lines 5-30.

It would have been obvious for one of ordinary skill in the art at the time the invention was made to combine the teaching of Etheredge and Horin and utilize the instant oily agents.

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Firstly, it would have been obvious to utilize other ester oils such as instant isopropyl palmitate since Etheredge teaches the use of ester oils such as ethyl oleate and oleyl oleate. One would have been motivated to do so since Horin teaches the instantly claimed oil and those taught in Etheredge are ester oils used in preshampoo compositions. Thus, a skilled artisan would have expected similar results by substituting Etheredge's ester oils with the instantly claimed ester oils since the prior art establishes the functional equivalency of both. Secondly, it would have been obvious to utilize the liquid paraffin since Etheredge teaches the use of paraffinic hydrocarbons. Further, absent the unexpectedness of the instant oily agents, it is considered prima facie obvious to select any oil taught to be suitable of preshampoo compositions.

With regard to claims 31-33, manipulation of concentrations such as the solvent is considered prima facie obvious since Etheredge teaches the use of the solvent as a penetration enhancer and to dissolve the oily components. Thus, depending on these factors, one would have been motivated to manipulate the concentrations during routine optimization.

**Claims 22, 26-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Etheredge (5,308,609) in view of Horin et al (4,279,262) in further view of Iwabuchi et al (4,517,175).**

The teachings of Etheredge and Horin have been set forth above.

Iwabuchi et al teach hair treatment compositions including preshampoos. Iwabuchi teaches solvent such as water, ethanol, glycerine, ethylene glycol, propylene glycol, 1,3-propanediol, isopropanol, polyethylene glycol. See column 6, lines 55-60.

It would have been obvious for one of ordinary skill in the art at the time the invention was made to combine the teaching of above references and utilize the instant solvents. One

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would have been motivated to do so since Iwabuchi teaches the instantly claimed solvent and those taught in Etheredge are suitable solvents in hair compositions including preshampoo compositions. Thus, a skilled artisan would have expected similar results by substituting Etheredge's solvent with the instantly claimed solvent since the prior art establishes the functional equivalency of both.

With regard to claims 26-27, it is obvious to a skilled artisan to utilize dipropylene glycol or propylene glycol absent the unexpectedness since both are polyhydric solvents.

**Claims 4-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Etheredge (5,308,609) in view of Priest et al (4,296,763).**

The teaching of Etheredge as been set forth above.

Although Etheredge teaches the use of heat to allow the composition to penetrate the hair, the reference does not specify the temperature or utilizing a cap.

Priest et al disclose a hair conditioning composition contained in a heating cap to provide "hot oil treatment" in an efficient manner . The composition contains oil and other components. See column 2, lines 3-14. Priest teaches the use of temperatures in the excess of 125 degrees Fahrenheit allow the oils such as vegetable or synthetic oils to penetrate the hair. Further, the oils act effectively to condition the hair if the oil is left on the hair for 15 to 20 minutes at elevated temperatures. See column 2, lines 15-17. Thus, when the hair is washed, the residual oil promotes luster, improves hair condition, and allays irritation. See column 3, lines 23-32..

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Etheredge et al and Priest et al and utilize the instant temperature and heating cap. One would have been motivated to do so since Priest et al states

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that if heat is applied to the hair containing an oil composition, the oil penetrates the hair shaft better and conditions the hair effectively in 15 to 20 minutes. Thus, a skilled artisan would have expected better conditioning effects by utilize the instant temperature since at a temperature of 123 degrees Fahrenheit, the oil is penetrates the hair faster. Lastly, a skilled artisan would have reasonably expected success and similar results since all three references endeavor to condition the hair with hair oil.

### *Conclusion*

All the claims remain rejected.

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

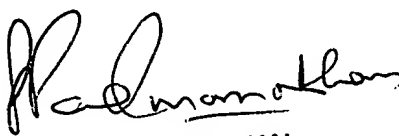
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sharmila S. Gollamudi whose telephone number is 571-272-0614. The examiner can normally be reached on M-F (8:00-5:30), alternate Fridays off.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gary Kunz can be reached on 571-272-0887. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Sharmila S. Gollamudi  
Examiner  
Art Unit 1616



**SREENI PADMANABHAN**  
**SUPERVISORY PATENT EXAMINER**